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THE Agricultural Situation

JUNE 1951

Volume 35 Number 6

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[**The AGRICULTURAL SITUATION is sent free to crop and price reporters in connection with their reporting work**]

Editor: Wayne Dexter

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Outlook Highlights

. . . JUNE 1951

Industrial Production High

Business activity continues high and supports a strong demand for farm products. Employment and income payments are at or near record levels. Higher receipts from salaries and wages accounted for most of the increase in personal income this spring. Relatively few people are without jobs. Wholesale prices of all commodities have been rather steady at a little below early February levels.

Industrial production has been steady this spring, expanding output for the military just about offsetting any decline in output of civilian goods. Retail sales at department stores picked up somewhat from March to April after declining for several months. Steel output in May appeared slightly above the previous month. Motor vehicle output remained at about the March level. Retailers' stocks of consumers' durable goods continued high. Work stoppages in southern mills in April caused a slight drop in the output of textiles, but output of nondurables was still well above a year earlier.

Future Goods Affected by Defense

Output of durable consumers' goods over the next few months will depend more and more on the progress made in defense production and upon allocations of critical materials for civilian use.

Prices Received Down Again

Prices received by farmers declined again in May. They have declined each month for 3 months—since the record high reached in February. Declines have been slight to moderate. May index was 1 percent below April, 3 percent below February.

Both crop and livestock prices averaged lower in May than in April. Main items lower were meat animals, strawberries, cotton, milk, wool, and wheat.

These declines were only partly offset by slightly higher prices for corn, butterfat, eggs and some truck and fruit crops.

Prices paid by farmers, including interest, taxes, and wage rates, were off slightly in May for the first time in several months, but the parity ratio continued to decline because prices paid dropped less than prices received. The ratio was 108 in May compared with 109 in April and 113 in February.

A Little More Meat Expected

Gains over last year in meat production are expected to be greater during the remaining months of '51 than those of the first quarter. Meat per person for the entire year may be 2 to 3 pounds larger than the 145 pounds consumed last year. The big increase will be in pork, which has been running about 10 percent larger than last year. Beef supplies will fluctuate more than usual the rest of the year but the total for June–December is expected to equal or exceed the total for the same months of 1950.

Farm Income Estimates Up

Farmers' cash receipts from marketings to June 1 this year are estimated at 10.9 billion dollars, 19 percent above the first 5 months of last year. Marketings were a little lower, but higher prices than a year earlier more than made up the difference in cash receipts. Prices of farm products were up 29 percent, while prices farmers paid for production items were up 13 percent for the 5-month period as compared with a year ago. Receipts from crops were about the same as a year ago with prices averaging higher. Receipts from meat animals, dairy products, poultry and eggs were all up from a year ago with prices also averaging higher.

Eggs in Seasonal Rise

Egg prices rose last month and are expected to rise seasonally until late in the year. Mid-May average was 45.2 cents per dozen and the egg-feed ratio was more favorable to producers this spring than last.

(Continued on page 14)

Our Hidden

MILK RESERVE

IN THIS CRITICAL period when we are mobilizing our food production resources, the dairy industry is in a unique position. Without producing a single additional pound of milk, the industry could make a big contribution to our national food supply.

The reason is, of course, that we are not using for human food all of the components of milk that are being produced. As far as the fat portion of our milk supply is concerned, practically all of it reaches the consumers dining table, mainly because it is priced high enough so that it is too valuable to waste. For the solids-not-fat portion, it is a different matter. We now use for human food only about seven-tenths of what is produced.

In a sense, that figure—70 percent—marks a very significant accomplishment. Twenty years ago only about half of the available milk solids-not-fat was used for food. Because of this increase, we are actually consuming more solids-not-fat per person than 20 years ago, even though milk production per person is lower than it was then. On the other hand, lower milk production per person has been accompanied by slightly lower consumption of butterfat.

Thirty Percent Not Used

Even more significant than the increased consumption of milk solids-not-fat is the fact that there still is nearly a third of these solids not being consumed by humans. In the future, that 30 percent may prove a very welcome addition to our food supply.

Most of the solids-not-fat that is not used for human food is produced on dairy farms which sell cream rather than whole milk. These farmers are not able to sell their skim milk at prices that they consider makes marketing worthwhile. Consequently, not all of the skim is used to the best advantage to the nation and some actually is wasted. Part of it is fed to livestock and ultimately reaches the

consumer as food. But the contribution of skim milk used in this way is only a fraction of what it would be if it were consumed directly.

Even though our national milk supply is far from being completely utilized, the dairy industry is making a major contribution to the national diet. More than three-fourths of the average calcium intake per person, nearly one-half of the riboflavin and one-fourth of our protein comes from milk and its products. (See accompanying chart.) The dairy industry also supplies an important part of the calories, fat, vitamin A and thiamine.

Many Lack Calcium

The estimated quantity of calcium per person provided by our national food supply is very close to the recommended allowances of the National Research Council. For the several other nutrients, the estimated amount in the per capita food supply, is a fifth or more above the recommended allowance.

It must be emphasized, however, that these figures are averages. Supplies of foods and nutrients are not evenly distributed among the population because of difference in income, size and composition of families, food habits, and availability of foods. An item frequently found lacking in diets is calcium. This is not surprising, since the recommended needs for calcium could be achieved for every American only if the available supply were equally divided throughout the population.

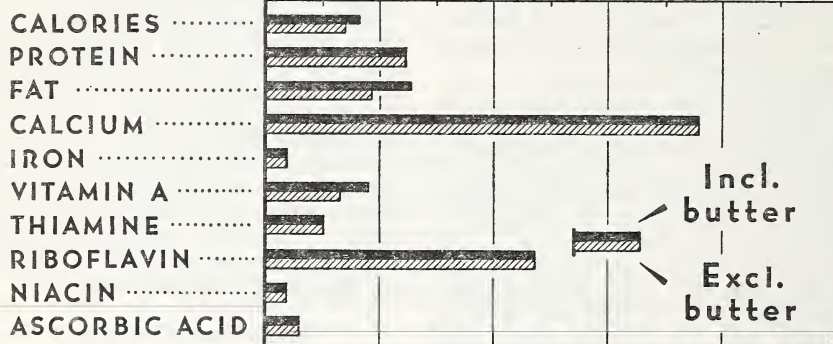
The per capita consumption of milk solids-not-fat in recent years has been running nearly 50 pounds. This compares with 38-40 pounds from the mid-1920's to the mid-1930's. This increase results from greater consumption of all the major dairy products except butter.

Increased consumption of fluid milk in the last 25 years has added about 3 pounds per person to consumption of

PERCENTAGE OF NUTRIENTS IN U. S. DIET SUPPLIED BY DAIRY PRODUCTS

PERCENT

0 20 40 60 80 100



DATA FROM BUREAU OF HUMAN NUTRITION AND HOME ECONOMICS FOR 1948

U. S. DEPARTMENT OF AGRICULTURE

NEG. 47760-XX

BUREAU OF AGRICULTURAL ECONOMICS

solids-not-fat. This was three-tenths of the total increase. Another 3 pounds has been added by the manufactured dairy products which contain both the fat and solids-not-fat of milk. The contribution of ice cream about doubled, and that of cheese and canned milk increased substantially. Manufactured skim milk products, including nonfat dry milk solids, added about 4½ pounds in the past decade.

Latest Figures

The latest figures available show that the different dairy products are contributing the following percentages of the total per capita consumption of milk solids-not-fat:

	Percent
Fluid milk and cream.....	58.3
Cheese.....	4.8
Condensed and evaporated, whole milk	7.5
Ice cream.....	3.4
Manufactured skim-milk products....	11.9
Unprocessed skim-milk products....	13.0
Other.....	1.1

Several factors account for the rise in per capita consumption of milk solids-

not-fat. A substantial rise in real incomes of consumers has helped account for increases in consumption of some items, particularly fluid milk and cream, cheese, and ice cream. Some dairy products have been packaged better and merchandised in a manner to promote increased purchases by consumers. An outstanding example is the larger variety of methods of packaging cheese now than in former years. The increase in number of outlets for ice cream, particularly grocery stores, has helped increase the consumption of this product. Results of research on nutrition have influenced some consumers directly and others indirectly through the advice given by physicians and through various food advertising efforts. All of these developments have tended to bring about increased consumption of this important solids-not-fat ingredient of milk.

Getting further increases in consumption of milk solids-not-fat is not a simple matter. It will require a continuous promotion, steady incomes for consumers and price policies that will

promote the movement of the different products. Sale of most dairy products, particularly the concentrated - type products to low-income consumers, can be increased by improved merchandising. Perhaps the lowest price source of the nutritious solids-not-fat of milk is the nonfat dry-milk solids product. Although sale of nonfat dry-milk solids to homes has increased noticeably in recent years, it has accounted for less than 1½ percent of the total domestic uses of nonfat dry milk solids.

The increase in consumption of milk solids-not-fat has helped to widen the market for American dairy farmers. Farmers are selling skim milk from about 15 billion pounds more whole milk than would be the case if solids-not-fat were being consumed at the rate per

person of the mid-1920's. If we are to use an even greater portion of solids-not-fat, it is important to broaden the market for dairy products. This also would provide prices to dairy farmers that will induce them to produce enough milk to satisfy the nutritional needs of the American people. Recent experience has been that for a given increase in consumer incomes, expenditures and prices are increased more for some products competitive with dairy than they are for dairy products themselves. This tends to hamper the maintenance of milk production in the United States, posing a tough problem for the mobilization period.

Herbert C. Kriesel
Bureau of Agricultural Economics

Farm Statisticians Honored

THREE agricultural statisticians of the Crop Reporting Service were honored by the Department of Agriculture on May 15 in ceremonies conducted at Washington, D. C.

They are Walter H. Ebling, in charge of the Federal-State Crop Reporting Service office in Madison, Wis., George A. Scott, head of the Crop Reporting office in Sacramento, Calif., and George C. Edler, in charge of seed work for the Bureau of Agricultural Economics.

Dr. Ebling received the Department's highest award—the Distinguished Service Award—for adapting the services of the Wisconsin Federal-State Crop Reporting Service to the problems of the State in such a way that it has become an integral part of the rural economy of the State. Ebling has been working with farmers and others in developing farm statistics for Wisconsin since 1927. Since then, he has developed the outstanding example of Federal and State cooperative work in the Crop Reporting Service. He also has developed services not ordinarily expected. For example, he has contributed to the education of farm boys and girls by providing Smith-Hughes agricultural teachers with teaching materials. His publications of agricultural data have

set a standard in form, content, and timeliness. And as a teacher at the University of Wisconsin, Dr. Ebling has been successful in assisting his students in understanding agricultural problems.

Mr. Scott received the Superior Service Award for exceptional service as agricultural statistician for California where he has developed for the farming interests of his State a comprehensive, timely, and factual statistical service. He was put in charge of the California office of the Crop Reporting Service in 1938 and since then has done much to widen the scope of agricultural statistics collected in that State. He has responsibility for the operation of the combined Federal-State program of statistical reports and services, in which the California Department of Agriculture has cooperated with the USDA since 1920.

George C. Edler, agricultural statistician in charge of seed work for the Bureau of Agricultural Economics, also received the Superior Service Award for his work in the development of seed statistics and improved methods of estimating seed production. Edler is one of two officials who devised the Department of Agriculture's Seed Reporting and Seed Verification Services.

More Productive Use Of Our Farm Manpower

GETTING THE most productive use of the manpower in agriculture is one of the key problems facing us during the emergency period. The farm labor force is shrinking as workers leave the farm to take jobs in the city or enter the armed services. At the same time, the Nation is faced with the need for record production of food and fiber.

The need for more efficient use of manpower in agriculture is not a new problem. It faced us during much of the last decade when the record war and postwar requirements for farm products had to be met with a reduced farm working force. Farmers met this situation in boosting total production 24 percent from 1940 to 1950. Production per worker jumped even more, rising 31 percent during the decade.

Despite the over-all gain in the productivity of farm labor, many of our farms, particularly the smaller ones, have lagged far behind. Considerable numbers of these farms are found in all sections of the country but they are more numerous in the "poor soil" areas where physical conditions have retarded improvements in farm production. They are a particularly large proportion of the total number of farms in most of the Eastern Cotton Belt, in the Appalachian and Ozark areas, the hilly areas of Oklahoma and Texas and the northern parts of the Lake States.

Not Just Labor Problem

The changes necessary to increase the productivity of farm workers are considerably different than those usually made in industry, since about four-fifths of those employed in agriculture are farm operators and members of their families. Increased productive employment of farmers generally does not mean merely working more hours a day or changing to another job that will use talents more fully. The farmer not only is a worker but also a manager and a businessman. Getting more pro-

ductive employment on the farm usually involves problems of management, finance and tenure. When migration to off-farm employment opportunities occurs the changes in job are clear cut but here a major change in occupation is usually involved.

Family labor makes up an even larger proportion of the working force on small farms where production per man is most likely to be relatively low. Of the approximately 5¾ million farms in 1945, nearly 1 million were classified as small-scale units having a value of farm production in 1944, of from \$500 to \$1,200, and with little or no work off the farm by the operator. Workers on the small-scale farming units were only one-fourth as productive as workers on medium-sized commercial-family farms in terms of gross production per worker (see table).

Half as Productive

Approximately 1½ million farms, with a value of production of from \$1,200—\$2,499, were classified as small commercial-family farms. Workers on these farms, on the average, were only 50 percent as productive as workers on medium-sized commercial-family farms in terms of production per worker.

In addition, there were approximately 1½ million small part-time residential units reported in the 1945 Census of Agriculture. Many of these families are counted in the farm-labor force. Farm production per worker in these farms indicates little about their productivity since most of their income came from other sources. Incomes from off-farm sources for the United States averaged about \$1,500 in 1946, according to a study of a sample of similar farms from a Nation-wide survey made by the BAE. On most of these farms, the operator or family members worked regularly off the farm. Others were retirement units. The level of productive employment of these families as indicated by incomes would

appear to be generally satisfactory, but there was considerable variation in the amount of employment and incomes reported.

Numbers of part-time and residential farms are greatly affected by how farms are defined. The 1950 census will probably count fewer of them as farms because of a change in the definition of a farm.

Crux of the Problem

Small-scale, and to a lesser extent small family farms, are the crux of the problem of ineffective use of manpower in agriculture. Mechanization and other technological developments have largely bypassed these farms. This is indicated not only by the low amounts of capital and the few kinds of farm equipment found on these farms, but also by the characteristics of the areas in which they are concentrated.

Difficulties in mechanizing cotton, tobacco, and other crops grown have prevented farm enlargement and development in some of these areas. In other areas, a large farming population and limited opportunities for off-farm work frequently have retarded the making of desirable adjustments and the adoption of improved methods of farming. When the changes in mechanization came before the areas were completely settled or stabilized, changes in size of farm were made more easily. This happened in some parts of the Great Plains, for example.

Production per acre and per unit of livestock is higher on the larger

farms than on the small farms. Improvements in agricultural practices in the past frequently have benefited the farmers on the good land more than those who have some physical disadvantages, such as rough topography or only small acreages of cultivatable soils. In addition, the larger capital accumulations and incomes have often provided the operators who have farms above average in size with better opportunities for adopting improvements in production methods. The use of improved varieties and cultural methods are often reflected in higher yields.

Big Gain Possible

The importance of the problem of improving productivity levels among farm operator-families on low production farms has been emphasized by a recent staff report to the joint Congressional committee on the economic report entitled "Underemployment of Rural Families." On the basis of available evidence, this report estimates that full employment of workers on small-scale, small commercial and part-time farms, at average rates of production, could add the equivalent of 1,600,000 workers to our total working force."

No one solution to the problem of getting more productive employment on small farms fits all cases. More intensive systems of farming may be the answer on some farms. Enlargement of the farm will be the best solution in

How Three Economic Classes of Farms Compare*

Item	Small scale	Small commercial family	Medium commercial family
Number of farms (thousands)-----	924	1, 662	1, 173
Proportion of all farms (percent)-----	16	28	20
Gross value of products per worker (dollars).	635	1, 249	2, 588
Index of gross value of product per worker (medium commercial farms=100).	25	48	100

*Data from Technical Bulletin 1019, "Sizes of Farms in the U. S." K. L. Bachman and R. W. Jones. Small-scale farms include farms having a value of products \$500 to \$1,200 with less than 100 days work off the farm by the operator. Small commercial family farms, \$1,200 to \$2,999. Medium commercial family farms, \$3,000 to \$7,999, with some additional adjustments in the various classes. Data from 1945 census.

other cases. Seasonal labor on other farms in the area and on farms in other areas may provide a means of increasing productive employment in some situations. Some farmers might do best by turning their place into a part-time farm or a residential unit and accepting regular off-farm employment either in the city or on other farms in the area. Others may find their best alternative is to quit farming and get a job in industry.

Recent technological developments have in many situations widened the opportunities for efficient intensive systems on relatively small acreages. Small-scale farmers whose best opportunities lie in agriculture should be encouraged to start the process of development and enlargement of their farms. In some situations substantial increases in production can be made by changes in farming systems and investment in capital improvements on their present farms.

Over the longer run, however, a program of enlargement as well as development is desirable in most cases. Production on small farms, even though increased, often will not fully utilize available labor and modern equipment and machinery. Enlarging these farms would mean that some

other people now living on such farms would move to the city.

Adjustments are often easier for operators of small farms located near urban centers than for those farther away. The operators can more easily find off-farm employment. Those wishing to leave the farm often can sell to those who wish to live in the open country and work in the city. When the farms are located a considerable distance from cities or towns, the opportunities for off-farm work by the operators are fewer and purchases for residential uses are less common.

To increase the productivity of farm families on these small farms often requires complex changes in the system of farming, techniques of production and size of farm rather than a simple substitution of capital for labor. To substantially increase productivity on many small farms in the South, for example, would involve a shift toward a livestock system of farming, new kinds and varieties of feed crops, new fertilization and cropping practices as well as mechanization of farm operations and increase in the size of the farm.

Kenneth L. Bachman
Bureau of Agricultural Economics

A letter TO CROP REPORTERS

WOMEN CROP reporters won praise from Laura Lane, a staff member of *Country Gentleman*, in the magazine's March issue.

She points out that, "These days statistics are just as important a factor in making money on a farm or ranch as equipment, good breeding stock, and the weather. Crop report figures provide an accurate, unbiased basis for the price of farm products so they may mean the difference between profit and loss on your farm."

Mrs. Lane says the women crop reporters she has met sum up the value of crop and livestock reports somewhat like this:

"Crop reports may determine when you buy what you need, when you sell

what you raise, whether to gamble on early pigs or late ones, when to expand your operations, and when to sit tight. You and your family have access to reliable crop and price information just as soon as the next fellow. The reports are a direct benefit to every farmer, distributor, and consumer, whether or not he reads them."

After telling of her visit with various women reporters in Kansas and Iowa, she concludes: "It has never occurred to the crop reporters I visited that they are among our most faithful, unhonored public servants."

S. R. Newell
Chairman, Crop Reporting Board
Bureau of Agricultural Economics

When Should You Cull Your Low-Producing Cows

EVERY DAIRY farmer has the problem of deciding when individual cows are no longer profitable and should be removed from the herd. The size of this problem is shown by the fact that in market milk areas such as the Northeast around 20 percent of the cows are culled annually. The percentage runs higher for some areas and for some farms.

Many of the cows removed are sterile, diseased, or otherwise unfit for further milk production. But a sizable proportion of those culled, perhaps as high as 20-25 percent, are removed because of low production. This is the group that requires a well-considered decision by the farm operator.

Some farmers approach the problem from the point of view that cost of feed is one-half of the total cost of producing milk. And going on from there they sometimes conclude that a cow must return twice the value of her feed in order to be worth keeping in the herd. This conclusion needs to be examined as to whether or not it is a good one.

True on the Average

Cost studies made by the State experiment stations, many of them in co-operation with the Bureau of Agricultural Economics, tend to bear out the "one-half" rule in the sense that in nearly every case when all farms studied are thrown together, the averages show feed to be roughly one-half of the total cost. This is true for different periods of time and for widely scattered areas. It is significant, however, that the averages for different studies vary enough around the one-half point to indicate that it is only a rough measure, even when considering the average of large groups of farms and large numbers of cows.

Granting that the "one-half" rule is a rough measure for large groups of farms and cows, the question still remains as to how well it would apply to

individual cows. The cost information mentioned above indicates that although the "one-half" rule will apply on the average to some groups of farms, it will not apply to others, and that the application of the rule to an individual cow is open to serious question.

Other Weaknesses

Actually, however, as a basis for farming decisions, other weaknesses in the rule are more important than those pointed out above. As mentioned earlier, the conclusion is sometimes drawn, based on the "one-half" rule, that a cow must return twice the value of feed consumed to be worth keeping. This is a very questionable conclusion even if feed costs are exactly 50 percent of the total. The main reason is the fact that many of the inputs going into milk production have no other use, at least in the short run.

For example, labor is an important cost in milk production, amounting to about one-third of the total as ordinarily computed. Yet most of the labor on a typical dairy farm is that of the operator and his family, and often has no alternative use that will produce any income except more leisure time. Under these conditions, a farmer may be much better off with a relatively low producing cow than without her, even though the cow is unprofitable by the "one-half" rule.

Suppose, for example, that a farmer has a cow producing 6,000 pounds of 4 percent milk a year, which is about average production for many of the dairy States. At prices fairly typical of recent years, feed costs would amount to \$170 and total returns to \$300. Applying the "one-half" rule, total costs would be \$340, leaving the farmer with a net loss of \$40 on the cow. Presumably, then, this cow should be culled, but before drawing that conclusion let us look at the effect on receipts and expenses. If he disposes of the cow, his gross income would be

reduced by \$300. Some of the expenses which are ordinarily considered as cost items would be reduced or eliminated but not all of them. Under most conditions, the reduction in expenses would be about as follows:

Grain, 1.3 tons-----	\$94
Hay, 2.8 tons-----	51
Milk hauling-----	12
Depreciation on cow-----	11
Dairy supplies and services-----	14
Miscellaneous-----	14
<hr/>	
Total reduction-----	196

This assumes that hay and home-grown grain can be sold at going prices, but that silage and pasture cannot. No reduction in labor cost is allowed on the reasonable assumption that the labor freed in handling one cow is not likely to find other productive employment, at least in the short run.

Thus, the result is a reduction in gross income of \$300, a reduction in expenses of about \$200, and a reduction in net income of around \$100. In other words, the farmer would be considerably better off financially by keeping the cow even though the "one-half" rule would indicate otherwise.

Questionable Assumptions

Other weaknesses of the "one-half" rule are due to the fact that it is based on certain assumptions which are questionable although usually unstated. Perhaps the most important of these is the assumption that the cows to which the rule apply are being fed at the most profitable rates. Actually this may or may not be true, and in most cases probably is not. Dairy cows under average management tend to be underfed, particularly in certain seasons of the year. When a cow fails

to meet the "one-half" test, the chief reason may be improper feeding. With improved feeding, both milk production and feed costs would increase but ordinarily the value of the increased milk would far exceed the cost of the increased feed. This is because an underfed cow can be expected to make a relatively large response in milk production to an increase in feed intake. The same weakness, of course, could creep into the receipts and expenses approach, but is much less likely since the more detailed data used there provide the basis for a good check on the best rate of feeding.

Cull After Analysis

What the rule really brings out is the well recognized fact that low producing cows are generally less profitable than high-producing cows. The farmer in question probably would benefit by replacing the 6,000-pound cow with an 8,000-pound cow if he could raise or purchase one at reasonable cost, but this is quite a different adjustment than merely eliminating the low producer.

This does not deny that some cows produce so little milk that they should be eliminated from the herd even without a replacement in sight. But a safer way to find such cows is by the type of analysis built around changes in receipts and expenses rather than by the "one-half" rule. And this type of analysis can easily be applied by any farmer who keeps records on milk produced and on feed used. Other cost items could be estimated if necessary.

M. S. Parsons

Bureau of Agricultural Economics

New Synthetic Rubber

A new synthetic rubber, superior for certain uses to both natural rubber and other synthetic rubbers, has been developed by the U. S. Department of Agriculture.

This new rubber, known as Lactoprene BN, has outstanding resistance to dry heat, water, oils, below-zero temperatures, and aging. It is expected to excel natural rubber and other synthetic rubbers for such uses as oil seals in automobile transmissions, refrigerant seals, gaskets, and linings for fuel tanks.

The improved rubber is made from compounds which can be produced from milk or corn sugars. The rubber's composition can be changed by varying the proportions of the chemical ingredients.

How Nutritious Are City Diets?

NUTRITIONALLY speaking, how good are city diets? Are they improving? In what nutrients are they likely to be short?

These are some of the questions the Bureau of Human Nutrition and Home Economics has answered from information brought out by surveys of families living in cities in the United States in 1948 and 1949.

It was found that on the average city families in the United States are well fed. The food brought into kitchens provided average quantities of protein, calcium, iron, and five well-known vitamins equal to or well above the yardstick of the National Research Council's recommended nutrient allowances.

Many Diets Short

When the nutritive content of each family's food was compared with the NRC's recommendation, however, many families were found to have diets short in one or more nutrients. Calcium was most likely to be short in diets. Next came vitamin C and several of the B vitamins.

But the encouraging fact is that the quality of diets is improving. In the spring of 1948, per capita calories for city families were 8 percent higher than in the spring of 1942 and quantities of other dietary essentials also increased.

Although these families used fewer potatoes and less grain or products made from grain, they more than made up for this in the increased amounts of vegetables and fruits, milk, eggs, meat, poultry, and sugar they consumed. The additional milk in their diets meant 16 percent more calcium and helped to bring about a considerable increase in riboflavin.

Enriched Bread and Flour

Enrichment of bread and flour helped to make possible rather big increases over the 6 years. In all, from a fifth to a fourth more iron and B vitamins were available in the diets. In 1942, only a part of the flour and bread sold to consumers was enriched. Also, the specifications for enrichment were lower. In 1948, nearly all families reported that the white bread and flour they bought were enriched. So something like 60 percent of the increase in iron, thiamine, and niacin between 1942 and 1948 resulted from the enrichment program. The remainder of the increases came about because of the greater quantities of meat, poultry, eggs, and some vegetables and fruits consumed.

As might be expected, high-income families had diets higher in most of the essential elements than did lower-income families. This was true in both 1942 and 1948. But in 1948, the differ-

Changes in Nutritive Content of Diets*

Nutrient	Lowest third by income in—		1948 as per cent of 1942	Highest third by income in—		1948 as per cent of 1942
	1942	1948		1942	1948	
Protein-----gm-----	86	100	116	94	104	111
Calcium-----do-----	. 85	1. 02	120	. 94	1. 10	117
B-vitamins:						
Thiamine-----mg-----	1. 79	2. 38	133	1. 94	2. 35	121
Riboflavin-----do-----	2. 01	2. 58	128	2. 27	2. 72	120
Vitamin C-----do-----	135	157	116	180	175	97

*Per adult-male unit per day.

Source: U. S. Department of Agriculture, Bureau of Human Nutrition and Home Economics, Nutritive Content of City Diets, October 1950. [Processed.]

ence between the two extremes was not so great. As it was the diets of families at the lower end of the scale that most needed improvement, this was a noteworthy achievement.

Part of this relatively greater improvement by the low-income families came about because these families increased their consumption of citrus and other fruits, fresh vegetables, and meat by more (percentagewise) than did the higher income group. The enrichment of white bread and flour also accounted for a good deal of this improvement. As grain products furnish a larger share of iron and the B vitamins in diets of low-than of high-income families, enrichment has contributed to this relatively greater improvement in the diets of the low-income families.

Changes in the nutritive content (per adult-male unit per day) of the diets of the families in the lowest and highest thirds of the income scale in both 1942 and 1948 are shown in the accompanying table.

Going back still farther than 1942, the Bureau has been able to compare

the dietary situation in 1936 with that in 1948. Remarkable gains have been registered. First, in calcium, the nutrient most likely to be short in diets when they are compared with the yardstick of the National Research Council's recommendations. In 1948, almost a third of city families had diets short in calcium. In 1942, about half of the diets were short and in 1936 about two-thirds. So the improvement in this nutrient has been great.

As for ascorbic acid, 20 percent of the city families had food supplies in a week in the spring of 1948 that did not meet recommended levels. Twelve years earlier it is estimated that 60 percent were short in this vitamin.

If such gains could be continued much progress would be made toward the goal of 150 million well-fed Americans.

Faith Clark

*Bureau of Human Nutrition
and Home Economics*

Esther Colvin

Bureau of Agricultural Economics

Census Shows Many Farm Houses Improved Since 1940

IN 1950, according to a preliminary report on housing characteristics in the United States from the 1950 Census of Housing, there were 6,485,000 rural farm dwelling units. Of these, 3,855,000, or a little more than two-thirds, were owned by their occupants. The remaining third were rented.

A decade earlier, the number of rural-farm dwellings was listed as 7,642,281. But because of a difference in the method used to determine farm and nonfarm residence this decrease in farm homes may be only apparent. In the 1950 census, dwelling units on farms for which cash rent was paid for the house and yard only were classed as rural nonfarm, as were dwelling units on institutional grounds, in summer camps, motels, and tourist camps. In 1950, farm dwelling units made up a little more than one-eighth of all housing units in the United States.

Of the more than 6 million farm

dwellings in the country, only a little more than a quarter million were vacant. Some of these were too dilapidated for occupancy; others were summer cottages, houses used only in winter. But 46,000 were not dilapidated and were year-round residences available for sale or rent.

As might be expected, most of these farm dwellings—more than 95 percent of them—were one-family detached houses. Apartment houses have never flourished in rural areas, although, surprisingly enough, quite a number are listed, including 1,000 with 20 or more units.

How large are the country's farm houses? The census shows that in 1950 four-, five- and six-room houses predominated, with more than a million of each. Together they made up a little more than 57 percent of all farm dwellings. Only 7 percent of the dwellings had nine or more rooms. At

the other extreme, only 1.7 percent were one-room units. The average number of rooms was 5.1. This compares with 4.6 for all housing units.

An estimated 14,000 trailers were used as farm homes in 1950. Of these, 10,000 were owned by their occupants; the remaining 4,000 were rented.

In 1950, the average number of persons per farm household was 3.5, with families of 2, 3, and 4 persons numbering more than a million each. There were 306,000 one-person households. At the other extreme, families with 10 or more persons numbered 153,000. The average number for all households in the country was 3.1.

Crop-Hail Insurance in 1950

FARMERS take out more hail insurance when crop prospects are favorable and prices and expenses are comparatively high. Then they have more to lose from a destructive hailstorm and the premiums are easier to pay in case there is no damage.

The poor prospect for the 1950 wheat crop in the Southwest greatly reduced the amount of crop-hail insurance carried by farmers in Colorado, Kansas, Oklahoma, and Texas in 1950 compared with that carried in the three preceding years.

The amount of hail insurance on tobacco has increased greatly in the last 10 years. North Carolina farmers carried 83 million dollars insurance on their tobacco crops in 1950—more than ever before. Hail damage to tobacco in North Carolina was more extensive last year than in any season since 1944.

Last year United States farmers paid about 40 million dollars in premiums for more than 1 billion dollars of hail insurance. From 1947 to 1949 more than 50 million dollars a year were paid in premiums each year for about 1¼ billion dollars insurance—about 8 times as much as in the middle 1930's. More crop-hail insurance is carried by farmers in Illinois than in any other State; but Kansas farmers pay more premiums, because of the higher risk in that State.

Payments for crop losses from hail were relatively low in 1950—about 41

The farm home is becoming a more convenient place in which to live. In 1950, more than 40 percent of all rural-farm dwelling units had running water installed; more than 27 percent had flush toilets; and almost 30 percent had bathtubs or showers. But much remains to be done along this line. These figures are a good deal lower than the figures for all dwelling units in the United States. Proportions for all housing units in the country are as follows: Approximately 8 out of 10 had running water; 71 percent had flush toilets; and 69 percent had private bathing facilities.

percent of premiums—compared with an average of about 54 percent for the previous 10 years. About 16 million dollars were paid farmers for losses from hail in 1950.

For many years more hail insurance has been carried on wheat than on any other crop, but corn was the leading crop in 1950.

With recent rate reductions, the net premium cost of crop-hail insurance on small grains and corn ranges from \$10 to \$20 per thousand dollars of protection in most of the Northern States east of the Mississippi. In parts of the Great Plains, however, the premium rate varies from \$120 to \$180 per thousand dollars of insurance. That these high premium rates are justified by the greater risk is shown by the fact that a higher proportion of premiums are returned to farmers as loss payments in the high-rate areas than in the low-rate areas.

Crop-hail insurance is written by stock companies, mutual companies, and by three State hail departments. For the first time since 1937, mutual companies carried more hail insurance in 1950 than did the stock companies. Because much of their business is concentrated in the lower-risk areas, the volume of premiums collected and losses paid by mutuals was less than that of the stock companies.

John C. Ellickson
Bureau of Agricultural Economics

Prices of Farm Products

Estimates of average prices received by farmers at local farm markets based on reports to the Bureau of Agricultural Economics. [Average of reports covering the United States weighted according to relative importance of district and State]

Commodity	5-year average		May 15, 1950	Apr. 15, 1951	May 15, 1951	Effective parity price May 15, 1951 ²
	Base period price 1910-14 ¹	January 1935- Decem- ber 1939				
Basic commodities:						
Cotton (pound).....cents.	³ 12.4	10.34	29.24	43.17	42.45	33.85
Wheat (bushel).....dollars.	⁴ .884	.837	2.04	2.14	2.11	2.41
Rice (cwt.).....do.	1.97	1.65	4.22	5.73	5.74	5.56
Corn (bushel).....do.	⁴ .642	.691	1.34	1.62	1.64	1.75
Peanuts (pound).....cents.	³ 4.8	3.55	10.7	10.8	11.0	13.1
Designated nonbasic commodities:						
Potatoes (bushel).....dollars.	⁴ 1.12	.717	1.31	1.12	1.09	⁵ 1.80
Butterfat (pound).....cents.	27.2	29.1	60.6	68.0	69.5	76.7
Milk, wholesale (100 lb.).....dollars.	1.70	1.81	3.49	4.36	4.23	4.79
Wool (pound).....cents.	20.1	23.8	55.4	113.0	106.0	56.7
Other nonbasic commodities:						
Barley (bushel).....dollars.	³ 6.19	.533	1.12	1.30	1.28	⁵ 1.52
Cottonseed (ton).....do.	26.10	27.52	⁶ 45.20	⁶ 103.90	⁶ 101.00	73.60
Flaxseed (bushel).....do.	1.67	1.69	3.60	4.37	4.16	4.71
Oats (bushel).....do.	³ .399	.340	.788	.907	.889	⁵ .981
Rye (bushel).....do.	³ .720	.554	1.24	1.61	1.61	⁵ 1.77
Sorghum, grain (100 lb.).....do.	³ 1.21	1.17	1.97	2.14	2.22	⁵ 2.97
Soybeans (bushel).....do.	1.00	.954	2.71	3.12	3.13	2.82
Sweetpotatoes (bushel).....do.	.908	.807	2.28	2.03	2.09	2.56
Beef cattle (100 lb.).....do.	7.62	6.56	23.10	30.20	29.50	19.80
Chickens (pound).....cents.	11.1	14.9	22.5	29.3	28.9	31.3
Eggs (dozen).....do.	³ 21.5	21.7	29.6	43.1	45.2	⁵ 52.8
Hogs (100 lb.).....dollars.	7.57	8.38	18.30	20.60	20.40	21.30
Lambs (100 lb.).....do.	7.71	7.79	24.70	34.30	32.60	21.70
Veal calves (100 lb.).....do.	7.84	7.80	25.60	33.90	33.20	22.10
Oranges, on tree (box).....do.	⁴ 2.29	1.11	1.96	1.77	1.92	⁵ 3.69
Apples (bushel).....do.	1.62	.90	2.40	1.87	1.84	2.83
Hay, baled (ton).....do.	8.58	11.20	22.00	23.10	22.90	24.20

¹ Adjusted base period prices 1910-14, based on 120-month average January 1941-December 1950 unless otherwise noted.

² Parity prices are computed under the provisions of title III, subtitle A, section 301 (a) of the Agricultural Adjustment Act of 1938 as amended by the Agricultural Acts of 1948 and 1949.

³ 60-month average, August 1909-July 1914.

⁴ 10-season average 1919-28.

⁵ Transitional parity, 90 percent of parity price computed under formula in use prior to Jan. 1, 1950.

⁶ Relatively insignificant quantities sold for crushing this month.

Outlook Highlights

(Continued from page 2)

Chicken Prices Hold Firm

Despite the large marketings of broilers from specialized enterprises and the seasonally increasing sales of farm produced chickens, chicken prices continue strong. At 28.9 cents per pound liveweight, the average price received by farmers in May was 92 percent of parity. Broiler-chicken placements have been at near record levels, well above last year.

Lower Prices for Live Cattle

Prices for live cattle under the new ceilings are expected to average about 10 percent less in June than in April

and about the same as in January. Rollbacks in price of beef and of cattle are scheduled for August 1 and October 1. The combined reduction at retail is to be 9 cents a pound. Live cattle prices are to be reduced proportionately, or to near those of last June.

Dairy Receipts Up

Cash receipts from dairying this year will rise above the 3.8 billion dollars of both 1949 and 1950 and may exceed the record 1948 total of 4.4 billion dollars. Net income, however, may be lower than in '48 because of higher production costs. The gain in cash receipts this year over '48 will result from larger production. Prices for milk and butterfat will average lower this year than in '48, though well above last year.

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Economic Trends Affecting Agriculture

Year and month	Industrial production (1935-39=100) ¹	Total income of industrial workers (1935-39=100) ²	Average earnings of factory workers per worker (1910-14=100) ³	Wholesale prices of all commodities (1910-14=100) ³	Index numbers of prices paid by farmers (1910-14=100)			Index numbers of prices received by farmers (1910-14=100)			
					Commodities	Wage rates for hired farm labor ⁴	Commodities, interest, taxes, and wage rates	Livestock and products			
								Dairy products	Poultry and eggs	Meat animals	All livestock
1910-14 average.....	58	50	100	100	100	100	100	100	100	100	100
1915-19 average.....	72	90	152	158	149	147	148	147	153	162	157
1920-24 average.....	75	122	221	160	159	181	168	159	163	121	140
1925-29 average.....	98	129	232	143	151	184	161	161	155	145	152
1930-34 average.....	74	78	179	107	117	121	124	105	94	83	91
1935-39 average.....	100	100	199	118	124	121	125	119	108	117	115
1940-44 average.....	192	236	315	139	148	211	152	169	145	166	162
1945 average.....	203	⁵ 292	389	154	179	359	189	230	194	207	210
1946 average.....	170	⁵ 277	382	177	197	387	207	267	197	243	241
1947 average.....	187	⁵ 330	436	222	230	419	239	272	219	329	287
1948 average.....	192	⁵ 356	472	241	250	442	259	300	235	361	314
1949 average.....	176	⁵ 328	478	226	240	430	250	251	219	311	272
1950 average.....	200	⁵ 369	516	236	246	432	255	247	181	340	278
<i>1950</i>											
May.....	195	349	502	228	244	-----	⁶ 253	230	154	342	269
June.....	199	362	513	230	245	-----	255	227	156	342	268
July.....	196	366	516	238	247	425	256	232	173	371	287
August.....	200	392	526	243	248	-----	258	240	191	369	292
September.....	211	396	⁵ 528	247	252	-----	260	248	196	372	298
October.....	216	405	540	247	253	428	261	261	201	358	296
November.....	⁵ 215	406	⁵ 542	251	255	-----	263	267	209	357	299
December.....	⁵ 218	416	556	256	257	-----	265	272	249	360	311
<i>1951</i>											
January.....	221	⁵ 416	⁵ 556	263	262	450	272	286	203	391	323
February.....	221	⁵ 419	⁵ 556	268	267	-----	276	285	205	425	340
March.....	222	424	561	269	272	-----	280	280	217	428	343
April.....	-----	-----	-----	268	273	479	283	275	215	428	340
May.....	-----	-----	-----	-----	272	-----	282	270	221	418	335

Year and month	Index numbers of prices received by farmers (1910-14=100)								All crops and live-stock	Parity ratios ⁸
	Crops									
	Food grains	Feed grains and hay	To-bacco	Cotton	Oil-bearing crops	Fruit	Truck crops	All crops		
1910-14 average.....	100	100	100	100	100	100	-----	100	100	100
1915-19 average.....	193	161	183	175	201	126	-----	171	164	111
1920-24 average.....	147	125	189	197	155	157	⁷ 152	162	150	89
1925-29 average.....	141	118	169	150	135	146	145	143	148	92
1930-34 average.....	70	76	117	77	78	98	104	84	88	71
1935-39 average.....	94	95	172	87	113	95	95	99	107	87
1940-44 average.....	123	119	241	138	170	150	164	145	154	101
1945 average.....	172	161	360	178	228	244	207	203	206	109
1946 average.....	201	196	376	237	260	250	182	227	234	113
1947 average.....	270	249	374	272	363	212	226	263	275	115
1948 average.....	250	250	380	270	351	174	214	252	285	110
1949 average.....	219	170	398	245	242	199	201	223	249	100
1950 average.....	224	187	402	280	276	200	185	232	256	100
<i>1950</i>										
May.....	230	190	387	246	248	195	178	223	247	97
June.....	218	190	388	251	254	207	182	225	247	97
July.....	226	195	387	278	267	211	200	236	263	103
August.....	224	193	399	311	293	200	164	239	267	103
September.....	221	194	428	336	303	217	126	243	272	105
October.....	219	188	426	327	300	207	138	238	268	103
November.....	224	192	428	346	351	194	188	250	276	105
December.....	233	202	436	339	366	202	211	258	286	108
<i>1951</i>										
January.....	240	214	442	347	374	192	324	275	300	110
February.....	254	222	440	351	379	204	333	283	313	113
March.....	245	221	437	359	386	202	265	276	311	111
April.....	247	222	438	363	385	205	225	275	309	109
May.....	244	223	438	357	380	194	239	271	305	108

¹ Federal Reserve Board; represents output of mining and manufacturing; monthly data adjusted for seasonal variation.

² Computed from data furnished by Bureau of Labor Statistics and Interstate Commerce Commission on pay rolls in mining, manufacturing, and transportation; monthly data adjusted for seasonal variation. Revised January 1950.

³ Bureau of Labor Statistics.

⁴ Farm wage rates simple averages of quarterly data, seasonally adjusted.

⁵ Revised.

⁶ Ratio of index of prices received to index of prices paid, interest, taxes, and wage rates. This parity ratio will not necessarily be identical to a weighted average percent of parity for all farm products, largely because parity prices for some products are on a transitional basis.

⁷ 1924 only.

Outlook Highlights

(Continued from page 14)

Butter Prices Higher

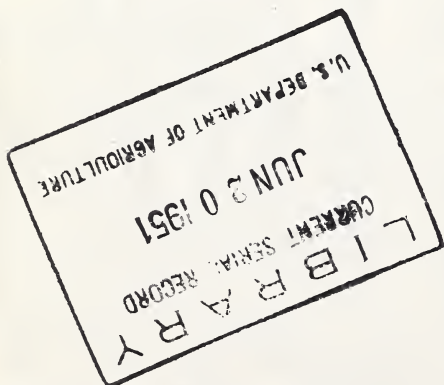
Butter rose 4 cents a pound mid-April to May 10, mainly because output has been relatively low while demands have strengthened. With butter production continuing under that of a year earlier, civilian consumption will be only about 10 pounds per person, near record low.

As usual, when consumer incomes rise, more fluid milk and ice cream is now being consumed and less milk is held back for butter. Milk-feed price ratio in May was slightly higher than a year earlier, while the butterfat feed-price ratio was a little below. Prices for both milk and butterfat continue low relative to meat animal prices.

Larger Food Supplies Ahead

Food supplies are expected to be larger this spring and early summer than a year ago. Requirements for the military are up, but an expected increase in output will prevent reductions for civilians. Increases expected include lard, margarine, meat (particularly pork), fresh and frozen fruit and berries, and canned fruit juices. Likely increases also of milk and cream, ice cream, and eggs. Fewer fresh vegetables. Butter production will be relatively low.

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